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Polypharmacy and Adverse Drug Reactions

To the Editor: I read with interest the article about antipsychotic polypharmacy by Kreyenbuhl and colleagues in the April issue (1). The authors concluded that the patients who were on long-term antipsychotic polypharmacy were more severely ill with psychotic symptoms. The inference was partly based on increased odds of hospitalization in the previous year among patients who received more than one antipsychotic drug.

Antipsychotic polypharmacy has been linked to a greater incidence of adverse reactions (2), which in turn may lead to increased hospitalizations (3). The average age of patients in the study was more than 50 years; thus the likelihood of hospitalizations as a result of medication side effects is even higher. Kreyenbuhl and colleagues also note that the patients who were receiving polypharmacy were taking more antianxiety medications, mood stabilizers, and anti-Parkinsonism drugs, which further increases the risk of adverse drug reac-

tions. An important determining factor in hospital admissions related to adverse drug reactions among elderly persons is the number of drugs being taken (4).

Kreyenbuhl and colleagues acknowledged the possibility of increased incidence of adverse reactions but did not consider it as a confounding factor in the study. It is conceivable that the hospitalizations among patients taking more than one antipsychotic were a reflection of the adverse drug reactions rather than the severity of illness.

Antipsychotic polypharmacy is a widely prevalent practice without any robust evidence to back it up. More studies are needed before this practice can be justified on empirical grounds.

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References

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In Reply: We appreciate Dr. Babbar's letter, which brings much needed attention to a serious safety concern—hospitalization for adverse drug reactions, which could result from treatment with multiple antipsychotic medications. We share his concern about this and other potential adverse consequences of a treatment

strategy that lacks solid evidence for its efficacy and safety.

Dr. Babbar correctly notes that patients prescribed antipsychotic polypharmacy in our study were more likely to receive several other psychiatric medications, which could further increase their risks of adverse effects and subsequent hospitalizations. In addition, patients receiving polypharmacy were prescribed antipsychotic dosages that were the same as or higher than for those receiving monotherapy and had greater use of anti-Parkinson agents, which suggests that they were at risk of or were already experiencing side effects related to excess antipsychotic exposure. These findings lend further support to Dr. Babbar's hypothesis that rather than reflecting the severity of patients' psychotic symptoms (a potential indication for the use of polypharmacy), the higher rate of past-year psychiatric hospitalization was a result of the adverse effects of multiple medications.

The overall goal of our study was to describe patient characteristics and treatment patterns associated with long-term antipsychotic polypharmacy. Although the safety and effectiveness of antipsychotic polypharmacy are important and unresolved issues, evaluating the outcomes of this treatment strategy was beyond the scope of our cross-sectional investigation. Further, we were not able to determine the reasons for the hospitalizations in question, although we do know that they reflected admissions to psychiatric or addiction treatment units. It is also important to note that the psychiatric hospitalizations occurred in the year before the period during which we documented patients' antipsychotic and other psychotropic treatments. We have no information regarding the medications prescribed before these admissions. This led us to infer that the previous hospitalizations were indicators of the severity of psychiatric illness of patients receiving antipsychotic polypharmacy, a conclusion reached by others who have reported a similar association